

# RECLAMATION

*Managing Water in the West*

## **Environmental Assessment for the Newlands Project Water Rights Retirement Program**

**Lahontan Basin Area Office  
Carson City, Nevada  
Mid-Pacific Region**

## **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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# Section 1

## Introduction

This document is the Environmental Assessment (EA) for the Newlands Project Water Rights Retirement Program (Retirement Program) and has been prepared in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Department of Interior regulations for the Implementation of the National Environmental Policy Act of 1969 (43 CFR Part 46).

The proposed federal action requiring environmental analysis in the EA for the Retirement Program is for the Bureau of Reclamation (Reclamation) to provide up to \$13 million for the retirement of water rights in the Newlands Project.

In part, Reclamation proposes to provide \$3 million to the Newlands Project Water Rights Fund (Fund). The United States has appropriated this funding through Public Law 110-161, Sec. 208. (a)(4), as amended by Public Law 111-8 to support a joint Federal, State and Pyramid Lake Paiute Tribe (Tribe) program for the retirement of water rights. The Retirement Program's goals are to permanently retire some surface water rights in the Newlands Project to benefit Pyramid Lake and to provide options to time-consuming and costly legal or administrative proceedings concerning challenged water rights.

Reclamation would also provide additional federal funds, in an amount up to \$10 million from Public Law 107-171, the Farm Security and Rural Investment Act of 2002, Section 2507, Desert Terminal Lakes as amended by Public Law 108-7 and Public Law 110-246 – Food, Conservation, and Energy Act of 2008 (Reclamation's Desert Terminal Lakes Program) to continue the retirement of surface water rights in the Newlands Project to benefit Pyramid Lake. Retirement of water rights would not exceed 6,500 acres, including those water rights previously retired under the Nevada Assembly Bill 380 Program (A.B. 380 Program). Reclamation would provide these funds to the Pyramid Lake Paiute Tribe through a financial assistance agreement to implement the Retirement Program and it is considered part of the proposed action for this EA.

## **1.1 Purpose of and Need for Action**

### **1.1.1 Purpose of and Need for Proposed Action**

The purpose of the Proposed Action is to provide water to at-risk natural desert terminal lakes which includes Pyramid Lake. Reclamation has been directed by Congress to provide the Newlands Project Water Rights Fund with \$3 million. Federal contributions to the Fund would provide necessary financial support to the Retirement Program to retire water rights in the Newlands Project area.

The Retirement Program would also provide options to administrative and judicial proceedings involving challenges to Newlands Project water rights that are time consuming and costly for all parties involved. The retirement of surface water rights would benefit both the Tribe and water rights owners because it offers options to reaching resolution on challenged water rights outside of the legal process.

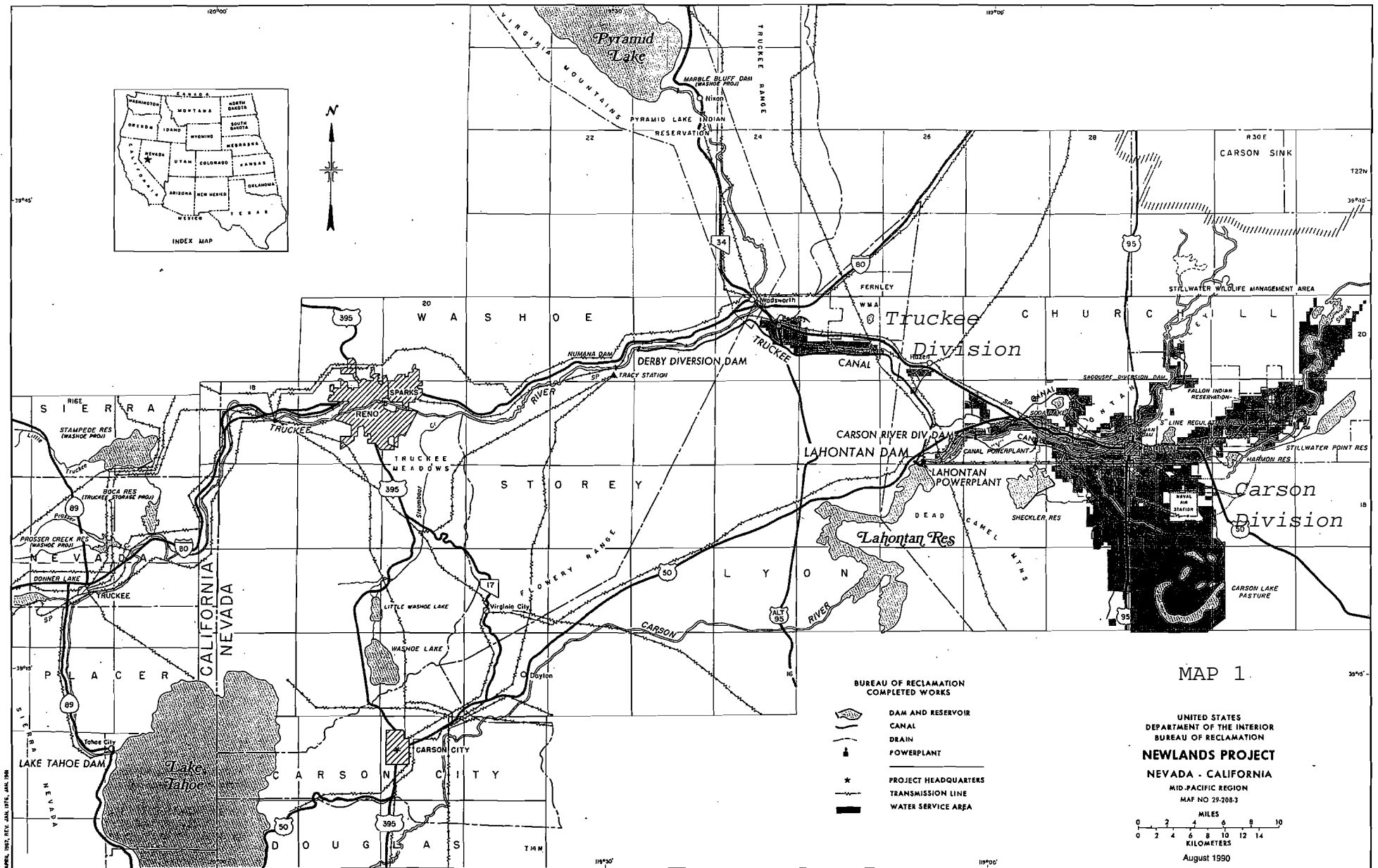
Reclamation would also provide additional funding to the Retirement Program, in an amount up to \$10 million from Reclamation's Desert Terminal Lakes Program to continue retiring up to, but not to exceed, 6,500 acres of surface water rights in the Newlands Project to benefit Pyramid Lake. Since the A. B. 380 Program retired 4,623 acres of water rights, the Retirement Program would be limited to retiring a maximum of 1,877 acres of water rights within the Newlands Project.

### **1.1.2 Location of Analysis Area**

The location of the area analyzed in the EA for the Retirement Program is fully described in the *2000 Environmental Assessment for the Assembly Bill 380 Water Rights Acquisition Program* (2000 EA for the A.B. 380 Program), which is hereby incorporated by reference (Reclamation 2000). See Map 1 for location of the Newlands Project and other landmarks. The project area includes the lower Truckee River corridor below Derby Dam, Pyramid Lake, the Bureau of Reclamation's Newlands Project, and the Carson River terminus areas downstream of the Newlands Project. Under the Retirement Program, surface water rights would be retired within the Newlands Project in Lyon and Churchill Counties, Nevada.

Reclamation's Newlands Project is made up of two divisions, the Truckee Division and the Carson Division. The Truckee Division includes the Truckee Canal and irrigation delivery system for service to approximately 4,000 acres of irrigated lands, mostly in Lyon County. Benchlands in this area receive 4.5 acre feet of water per acre for irrigation purposes. Irrigation water in the Truckee Division is supplied entirely by diversions from the Truckee River.

The Carson Division includes Lahontan Dam and Reservoir, the Carson River Diversion Dam and irrigation delivery system for approximately 55,000 acres of irrigated acreage, mostly in Churchill County. Bottomlands in this area receive 3.5 acre feet of water per acre for irrigation purposes. Irrigation water in the Carson Division is supplied by a combination of Carson River and supplemental Truckee River water that is stored in Lahontan Reservoir for use downstream.



### **1.1.3 Background**

The Newlands Project has had a long history of contentious administrative and judicial disputes regarding the forfeiture, abandonment or failure to perfect surface water rights in the Truckee-Carson River basins.

Early 20<sup>th</sup> Century development for municipal, industrial and agricultural uses (particularly for the Newlands Project) changed river discharge patterns and increased water diversions in the Truckee River watershed. By the mid-1930s, Pyramid Lake was nearly 80 feet lower than in 1900. This contributed to dramatic declines in fish populations of great cultural importance to the Tribe, for the endangered cui-ui found only in Pyramid Lake and the Truckee River and for the threatened Lahontan cutthroat trout.

The Tribe sought abandonment and forfeiture of water rights, and challenged water rights transfers with the goal of reducing diversions from the Truckee River into the Newlands Project. The Tribe filed petitions with the Orr Ditch and Alpine Decree through the U.S. District Court of Nevada alleging certain rights were not perfected or were forfeited and abandoned. Simultaneously, the Tribe protested water-right transfer applications with the State of Nevada (some of these acres overlap with petitioned acres) where the water right owner had filed an application with the State Engineer to change the place of use of the water rights and the Tribe protested the change. A total of 9,429 water-righted acres in the Newlands Project was disputed by the Tribe through either judicial or administrative proceedings.

By 1999, representatives of various parties and the Nevada legislature were working to create a water rights retirement program to move toward the Tribe's goal of reducing Truckee River diversions and the water users' goals of obtaining compensation for their challenged water rights or removing the legal challenge to those rights.

#### Nevada Assembly Bill (A.B.) 380 Program (1999 - 2006):

Nevada Assembly Bill 380, passed in the 1999 session of the Nevada State Legislature, was negotiated by a group of Tribal, local and government interests affected by the long-standing water rights conflicts and was designed to help settle some of these disputes.

A.B. 380 created a water rights acquisition and retirement program, intended to resolve the administrative and judicial disputes involving 9,429 water righted acres in the Newlands Project by acquiring and permanently retiring water rights appurtenant to 6,500 acres. Once a quantity of water rights equal to 6,500 acres was retired, the Tribe had agreed to withdraw or dismiss its water rights transfer protests and petitions on remaining acreage associated with the original 9,429 water-righted acres in dispute.

A Joint Testimony on A.B. 380, including commitments and agreements of the signatories to the testimony, was incorporated by reference into the law. The

signatories to the Joint Testimony were the Tribe, Truckee Carson Irrigation District (TCID), Sierra Pacific Power Company, Churchill County, and the City of Fallon.

The A.B. 380 legislation created the Newlands Project Water Rights Fund to be administered by the Carson Water Subconservancy District (CWSD). A total of \$14,020,655 was spent to acquire and retire 4,623.54 acres of water rights through 1,328 transactions before the Fund was exhausted. Most of the water rights retired by the A.B. 380 Program were not used by the water rights owners but the owners continued to pay annual operations and maintenance fees for these water rights (James, pers. comm. 2010). Many of these water rights were not used because there was no longer any actual means of conveyance due to the conversion of agricultural land to urban uses (CWSD 2008).

Contributing to the Fund were the Bureau of Reclamation (\$6.087 million), State of Nevada (\$3.3 million), Truckee Meadows Water Authority and Sierra Pacific Power Company (\$3.44 million), Carson-Truckee Water Conservation District (\$100,000), interest earned on funds held on behalf of the program and other miscellaneous funds (CWSD 2008).

The A.B. 380 provision creating the Newlands Project Water Rights Fund expired on June 30, 2006.

Post- Assembly Bill 380 (2007-2009):

When the A.B. 380 water right retirement program fell short of the goal of retiring 6,500 acres of water rights, the Tribe moved to reactivate petition cases filed at the U.S. District Court (Court) seeking the forfeiture of challenged water rights.

The Court issued orders in 2008 and 2009 concerning legal issues that were brought before the court following the conclusion of the A.B. 380 Program. The Court ruled on the status of the A.B. 380 Joint Testimony, the status of prior petitions filed by the Tribe, and on rules for filing new petitions. The Court stated that the 6,500 acres of water rights could be retired and abandoned through the combination of the water rights acquisition program and final determinations in the Tribe's petitions and protests outside of the acquisition program.

However, there is no consensus among the parties involved as to the legal effect of these Court orders. The Tribe could decide to request an appeal to the Ninth Circuit Court in the future on certain legal points of contention. The Tribe asserts that the A.B. 380 Program was unsuccessful in reaching the goal of retiring 6,500 acres of water rights, and they are under no obligation to continue with the terms outlined in the Joint Testimony. If the original A.B. 380 goal of retiring 6,500 acres of water rights is reached, the Tribe might consider dropping the petitions on challenged water rights and withdrawing protests on water rights transfers, but the Tribe contends that they are not obligated to take these actions.



In 2002, Congress passed Public Law 107-171, the Farm Security and Rural Investment Act of 2002, Section 2507, Desert Terminal Lakes as amended by Public Law 108-7 and Public Law 110-246 – Food, Conservation, and Energy Act of 2008 which transfers funds to the Bureau of Reclamation to be used, in part, to provide water to at-risk natural desert terminal lakes. Reclamation intends to use this authority to provide up to \$10 million from these funds (for a total of \$13 million) to continue the retirement of surface water rights in the Newlands Project under the Retirement Program to benefit Pyramid Lake.

In 2007, Congress passed the Consolidated Appropriations Act, Public Law 110-161, Sec. 208. (a)(4), (as amended by P.L. 111-8 in 2009). This legislation provides that the Secretary of the Interior, *"shall allocate \$3,000,000 to the Newlands Project Water Rights Fund for a Federal-State-Pyramid Lake Paiute Tribe program, to be administered by an entity identified by the 3 applicable parties for the retirement of water rights."* In addition to the Pyramid Lake Paiute Tribe, Reclamation is the Federal representative and the State of Nevada, Department of Conservation and Natural Resources is the State entity referenced in the legislation. Great Basin Land and Water, a Nevada non-profit organization, has been identified as the Administrator for the Retirement Program and for the Fund by the three parties named in this legislation. The "new" Newlands Project Water Rights Fund, while bearing the same name as the fund created by Nevada A.B. 380 legislation, is a different fund and is not tied to any Nevada legislation.

## **1.2 Purpose and Need for Environmental Assessment**

### **1.2.1 Background on the 2000 Environmental Assessment**

A *Finding of No Significant Impact* determination was signed on September 12, 2000 by Reclamation for actions analyzed in the *2000 Environmental Assessment for the Assembly Bill 380 Water Rights Acquisition Program* (2000 EA for the A.B. 380 Program). The decision was to implement Alternative 2 – Proposed Action, which resulted in Reclamation funding a portion of the A.B. 380 Program. The Proposed Action included Reclamation providing up to \$10 million of federal funds over a period of years for retiring up to a total of 6,500 acres of surface water rights in Reclamation's Newlands Project.

The 2000 EA for the A.B. 380 Program indicated that the Proposed Action would benefit the trust assets of the Pyramid Lake Paiute Tribe by less irrigation water being diverted from the Truckee River to the Newlands Project, higher inflows into Pyramid Lake and higher Pyramid Lake water elevations than the No Action alternative. The analysis indicated that the amount of active irrigated acreage in the Newlands Project would increase with or without the implementation of the A.B. 380 Program. However, fully implementing the Proposed Action could result in slightly less active irrigated acres than the No Action alternative which describes a future where legal and administrative proceedings have been resolved at some future date.

The A.B. 380 Program succeeded in retiring 4,623.54 acres of water rights in the Newlands Project before the Fund was exhausted. The Nevada legislative effort through A.B. 380 expired in July of 2006, but interest in retiring additional water rights in the Newlands Project continues.

### **1.2.2 2010 Environmental Assessment for the Retirement Program**

The Proposed Action to fund the Newlands Project Water Rights Retirement Program fits within the context of the environmental analysis prepared by Reclamation in 2000 for the A.B. 380 Program. The 2000 analysis addressed the effects of retiring up to a total of 6,500 acres of water rights, as compared to taking no action. Implementing the 2010 Retirement Program would result in either an incremental gain toward that objective or in reaching the objective, depending on the amount of funding provided and other factors, such as demand for the program. Although the legal significance of reaching the 6,500 acre goal for water rights retirement is uncertain, the 2000 EA for the A.B. 380 Program still provides a reasonable range of alternatives for the current environmental analysis.

Since a period of time has elapsed following the A.B. 380 Program effort, this EA for the Retirement Program considers whether new circumstances, new information, or changes in the action or its impacts not previously analyzed warrant new analysis. Section 2 provides an update on the current Proposed Action to fund the Retirement Program. Please refer to the 2000 EA for the A.B. 380 Program for a detailed description of the authorized project's affected environment and environmental consequences.

### **1.2.3 Authority**

The Newlands Project Water Rights Retirement Program is authorized by:

- Public Law 107-171 (Farm and Rural Security Investment Act enacted in 2002) Section 2507 provided \$200 million to Reclamation to provide water to at-risk natural desert terminal lakes with the provision that the funds not be spent to purchase or lease water rights.
- Public Law 108-7 (Omnibus Appropriations Bill enacted in 2003) Section 207 clarified that the money provided in PL 107-171 could only be used for Pyramid, Summit, and Walker Lakes in Nevada.
- Public Law 110-246 (Food, Conservation, and Energy Act of 2008) Section 2807 amended PL 107-171 to provide an additional \$175 million to benefit at-risk natural desert terminal lakes along with specific authority for water leasing and the purchase of land, water, and related interests to achieve that purpose.

- Public Law 110-161 (Consolidated Appropriations Act enacted in 2007) Section 208 (a)(4), as amended by Public Law 111-8:

*“Notwithstanding any other provision of law, of amounts made available under section 2507 of the Farm Security and Rural Investment Act of 2002 (43 U.S.C. 2211 note; Public Law 107-171), the Secretary of the Interior—*

*(4) shall allocate \$3,000,000 to the Newlands Project Water Rights Fund for a Federal-State-Pyramid Lake Paiute Tribe program, to be administered by an entity identified by the 3 applicable parties for the retirement of water rights.”*

## Section 2

### Alternatives Considered

The 2000 EA for the A.B. 380 Program analyzed the No Action alternative and the Proposed Action alternative to retire up to a total of 6,500 acres of water rights in the Newlands Project. This Section updates information on the alternatives to include providing funding to the Newlands Project Water Rights Retirement Program to continue retiring surface water rights.

#### 2.1 No Action

The No Action Alternative is not a continuation of existing conditions in perpetuity; rather it is a reasonable prediction of foreseeable future conditions expected to occur without the proposed action. The No Action alternative is analyzed at a point in the future when all of the Tribe’s legal or administrative challenges to Newlands Project water rights are expected to be concluded.

Under the No Action alternative, Reclamation would not provide up to \$13 million, including \$3 million to the Newlands Project Water Rights Fund as directed by Public Law 110-161, Sec. 208 (a)(4), and up to an additional \$10 million from Reclamation’s Desert Terminal Lakes Program to continue the retirement of surface water rights in the Newlands Project. Both the Retirement Program and the Fund would be unfunded and an estimated 400 to 1,877 acres of additional surface water rights would not be retired in the Newlands Project through this effort.

The Tribe might decide to pursue legal or administrative proceedings on challenged water rights within the Newlands Project.

In the 2000 EA for the A.B. 380 Program, for analysis purposes Reclamation assumed that the probable rate of success (win:loss record) that the Tribe, together

with the United States, would have in litigation of the challenged water rights cases (the water transfer and petition cases) was 60:40. Reclamation has no information to indicate this assumption should be changed for the purpose of this analysis.

As described in Section 2.1 of the 2000 EA for the A.B. 380 Program, for the purpose of conducting the analysis it is assumed that up to 75,000 acre feet of water rights planned for acquisition under the Fish and Wildlife Service (FWS) Water Rights Acquisition Program for Lahontan Valley Wetlands would be completed over a 25 to 30 year period. As of 2009, about 39,700 acre feet of water has been acquired from the Carson Division for the Lahontan Valley wetlands (Grimes, pers. comm. 2009).

## **2.2 Proposed Action**

Under the Proposed Action, Reclamation would provide from \$3 million to \$13 million for the Newlands Project Water Rights Retirement Program.

Initially, Great Basin Land and Water (GBLW), the Nevada non-profit selected to administer the Retirement Program and the Fund would manage the Retirement Program to retire \$3 million worth of surface water rights in the Newlands Project. An estimated 400 to 700 acres of surface water rights over a 2 year period may be retired under this program. The expected size of the average transaction would be approximately 2 acres. Transactions are likely to be randomly located and, with 94 percent of purchases from the Carson Division and 6 percent from the Truckee Division of the Newlands Project, based on the results of the A.B. 380 Program. Water rights owners would be paid to retire water rights and at no time would the water right change ownership. In addition, TCID would receive a \$1,233 payment for each acre of surface water rights that are retired, as an offset for lost operating and maintenance revenues associated with the retirement of water rights.

Water rights to be retired may be either active or inactive. Most of the water rights retired by the Retirement Program are expected to be currently unused, similar to the results obtained by the A.B. 380 Program. However, GBLW would work cooperatively with the U.S. Fish & Wildlife Service (FWS) to minimize competition between the Retirement Program and the FWS Water Rights Acquisition Program for Lahontan Valley Wetlands.

Water rights would be retired only from willing sellers. GBLW would establish criteria for determining fair market value of the water rights to be retired. Water rights under challenge by the Tribe may receive priority, but owners of unchallenged water rights may also participate in the program. The Retirement Program would prioritize applications from individuals who hold water rights, but other owners of water rights such as government entities may also participate.

Reclamation's Desert Terminal Lakes Program would also provide additional federal funds, in an amount up to \$10 million to continue the retirement of surface water rights in the Newlands Project. These funds would be provided to the Tribe through a

financial assistance agreement to implement the continuation of the Retirement Program.

Depending on the total amount of funding provided and other factors, such as demand for the program, a maximum of 1,877 acres of water rights could be retired by the Retirement Program.

The Tribe might decide to pursue legal or administrative proceedings on challenged water rights within the Newlands Project.

The timeline for the authority to acquire water rights under the Retirement Program would terminate when a total of 6,500 acres of surface water rights in the Newlands Project are retired. This may include water rights retired by the Retirement Program, water rights previously retired by the A.B. 380 Program, or as directed by the conclusion of certain legal or administrative proceedings.

As in the No Action alternative, the Proposed Action alternative assumes that up to 75,000 acre feet of water rights planned for acquisition under the Fish and Wildlife Service (FWS) Water Rights Acquisition Program for Lahontan Valley Wetlands would be completed over a 25 to 30 year period. As of 2009, about 39,700 acre feet of water has been acquired from the Carson Division for the Lahontan Valley wetlands (Grimes, pers. comm. 2009).

## **Section 3**

# **Affected Environment and Environmental Consequences**

This Section presents the environmental consequences of the Proposed Action alternative. The objective of this Section is to determine whether new circumstances, new information, or changes in the action or its impacts not previously analyzed warrant new analysis. Please refer to the 2000 EA for the A.B. 380 Program for a detailed description of the authorized project's affected environment and environmental consequences.

### **3.1 Background**

#### **2000 EA for the A.B. 380 Program**

The 2000 EA for the A.B. 380 Program evaluated the effects of the No Action and Proposed Action alternatives on water levels in Lahontan Reservoir and Pyramid Lake, the quantity of diversions into the Truckee Canal, the volume of flow in the Carson and Truckee rivers, the amount of water flowing to the Lahontan Valley

wetlands and the amount of water-righted acres in the Newlands Project. Most of these effects were calculated using the Below Lahontan Reservoir (BLR) Model. The BLR model obtains Lahontan Reservoir storage (Truckee Canal inflow) and inflow to Pyramid Lake from the Truckee River Operating Model.

The BLR model provided approximate representations to assist in the analysis of the environmental consequences of the two alternatives (No Action and Proposed Action). A summary of the model results was included in the 2000 EA for the A.B. 380 Program and is reprinted below in Table 1.

Under the No Action alternative, the Tribe's legal or administrative proceedings over challenged water rights are assumed to be concluded over time. Upon the implementation of the Proposed Action alternative, the balance of the acreage associated with the challenged water rights would become potentially productive acreage. The model results indicated that the amount of active irrigated acreage in the Newlands Project would increase with or without the implementation of the water rights program to retire a total of 6,500 acres of surface water rights. However, after the Proposed Action was fully implemented there is estimated to be 843 (or 1.3%) fewer active irrigated acres in the Newlands Project than there would be if legal and administrative proceedings were resolved at some future date as described by the No Action alternative.

The BLR model results indicate that under the Proposed Action alternative, there would be less water diverted from the Truckee River to the Newlands Project and therefore, more flows from the Truckee River would reach Pyramid Lake. Consequently, less water would reach Lahontan Reservoir and the Lahontan Valley wetlands in comparison to the No Action alternative.

The 2000 EA for the A.B. 380 Program provides an analysis of the effects of these changes for each of the resource categories.

**2010 EA for the Retirement Program**

The key inputs used to generate BLR model results that were analyzed in the 2000 EA for the A.B. 380 Program were re-evaluated based on present day conditions. A relative comparison of these factors indicates that similar results would be expected if the model was used to generate a new analysis. Therefore, similar trends in the amount of active acreage in the Newlands Project, flows in the Truckee River, and water levels in Lahontan Reservoir, Lahontan Valley wetlands, and Pyramid Lake under the No Action or Proposed Action alternatives also apply to this EA for the Retirement Program.

<b>*Table 1: Comparison of Results for Current Condition<sup>4</sup>, No Action and A.B. 380</b>				
	<b>Current<sup>1</sup></b>	<b>No Action (60:40)<sup>2</sup></b>	<b>A.B. 380<sup>3</sup></b>	<b>A.B. 380 vs No Action</b>
<b>TRUCKEE RIVER BASIN</b>				
Average Diversion at Derby Dam (acre-feet)	<i>94,100</i>	105,200	101,000	<b>-4,200</b>
Truckee River Inflow to Pyramid Lake (acre-feet)	<i>477,600</i>	466,700	470,800	<b>4,100</b>
Ending Pyramid Lake Elevation in 95 years (feet)	<i>3,839.6</i>	3,835.0	3837.1	<b>2.1</b>
Ending Adult Female Cui-ui	<i>605,700</i>	333,600	392,200	<b>58,600</b>
A.B. 380 Truckee Division Acquisitions (acres)	<i>0</i>	0	65	<b>65</b>
<b>CARSON RIVER BASIN</b>				
Total Newlands Project Active Water Rights (acres)	<i>59,963</i>	63,735	62,892	<b>-843</b>
Lahontan Reservoir Release and Spill (acre-feet)	<i>309,500</i>	313,500	304,400	<b>-9,100</b>
Total Lahontan Valley Wetlands Water Supply (acre-feet)	<i>62,700</i>	114,300	111,400	<b>-2,900</b>
Primary Wetland Habitat (acres)	<i>13,597</i>	24,368	23,556	<b>-812</b>
A.B. 380 Carson Division Acquisitions (acres)	<i>0</i>	0	6,435	<b>6,435</b>

<sup>1</sup> Current Condition does not include 9,429 water-righted acres that are currently challenged by the Tribe; some acres may have been retired under the A.B. 380 Program.

<sup>2</sup> Assumes Tribe prevails in 60% of water rights litigation in the Newlands Project and completed FWS Wetlands Water Rights Acquisition

<sup>3</sup> 65 acres of water rights acquired and retired in the Truckee Division and 6,435 acres in the Carson Division and completed FWS Wetlands Water Rights Acquisition

<sup>4</sup> Current Condition in Table 1 reflects the situation when model results were generated.

\*Table 1 was originally Table 2.1 on page 2-4 of the EA for the A.B. 380 Program.

## **3.2 Changes to the Proposed Action**

Any changes between the Proposed Action alternatives described for the 2000 A.B. 380 Program and the 2010 Retirement Program are administrative in nature and would not result in any new or greater impacts beyond those previously analyzed.

## **3.3 Vegetative Communities**

### **3.3.1 Affected Environment**

The 2000 EA for the A.B. 380 Program describes the various plant communities in the analysis area. The implementation of the flow regime to benefit cottonwood tree regeneration on the lower Truckee River has continued, in order to encourage seedling establishment throughout the growing season. Eurasian watermilfoil (*Myriophyllum spicatum*) a State of Nevada listed noxious aquatic weed, has been reported to occur downstream in the Truckee River to Marble Bluff Dam (Mosley, 2009) and is now present in the Truckee Canal (Nibling, 2009).

### **3.3.2 Environmental Consequences**

The potential effect to vegetation from implementation of the alternatives was described in the 2000 EA for the A.B. 380 Program. Section 4.1 of the 2000 EA stated that by implementing the Proposed Action, the amount of irrigated agricultural acreage in the Newlands Project would be expected to increase over current conditions by approximately 2,929 acres. As the FWS wetlands water rights acquisition program is completed, the total number of irrigated acres in the Newlands Project is anticipated to decrease by an estimated 21,000 acres. There would be approximately 843 less acres of agricultural plant communities under this alternative than under the No Action alternative.

The analysis for the 2000 EA for the A.B. 380 Program adequately addresses the effects of the No Action alternative and the Proposed Action to fund the Retirement Program, resulting in the retirement of an estimated 400 to 1,877 acres of surface water rights. There are no known new circumstances, new information, or changes in the action or its impacts not previously analyzed that would warrant new analysis.

## **3.4 Wildlife and Endangered, Threatened, Candidate Species**

### **3.4.1 Affected Environment**

The following changes have occurred to the list of species that are protected by the Endangered Species Act of 1973 (ESA); these species were addressed in the 2000 EA for the A.B. 380 Program.



American peregrine falcon

The Errata Sheet for the 2000 EA for the A.B. 380 Program noted that the American peregrine falcon was no longer a listed species under the ESA.

Bald Eagle

The bald eagle was removed from listing under the ESA in 2007. The bald eagle continues to be protected by the Bald and Golden Eagle Protection Act and by the Migratory Bird Treaty Act.

Mountain Plover

The mountain plover was proposed for listing as a threatened species under the ESA in 1999; the U. S. Fish and Wildlife Service withdrew the proposed rule in 2003. While the mountain plover is no longer a candidate species on the ESA list it is still protected by the Migratory Bird Treaty Act.

For this EA for the Retirement Program, federally listed species under the ESA include the cui-ui (endangered) and Lahontan cutthroat trout (threatened). Both fish species are known to inhabit the Lower Truckee River and Pyramid Lake. The following plans provide guidance for resource planning in the portion of the project area that contains these species.

*Cui-ui Recovery Plan* (U.S. Fish and Wildlife Service 1992a). In 1992, the USFWS published a recovery plan for the cui-ui. The Recovery Plan lays out four categories of conservation measures: (1) increase volume and timing of flows into Pyramid Lake; (2) rehabilitate habitat in the lower Truckee River; (3) achieve water quality standards; and (4) improve fish passage. The primary goal of this plan is to delist cui-ui. The cui-ui will be considered for reclassification when it is demonstrated that (1) the species has a probability of at least 0.85 of persisting for over 200 years; (2) additional annual Truckee River inflow to Pyramid lake of 45,000 acre-feet or the equivalent benefit has been secured at a minimum rate of 5,000 acre-feet/year; and (3) the estimated numbers of adult cui-ui and year classes of juveniles and adults has been stable or increasing during the previous 15 years.

While these goals have not yet been achieved, progress has been made in the form of improved flow regimes using Stampede Reservoir water, improving fish passage at Marble Bluff Dam, and raising water levels in Pyramid Lake, which has provided some help with fish passage at the delta.

*Lahontan Cutthroat Trout Recovery Plan* (U.S. Fish and Wildlife Service 1995, 2003). In 1995, the USFWS published a recovery plan for the Lahontan cutthroat trout. The primary goal of this plan is to delist LCT from the List of Threatened and Endangered Wildlife and Plants. Subsequently, USFWS released the *Short-term Action Plan for Lahontan Cutthroat Trout (*Oncorhynchus clarki henshawi*) in the Truckee River Basin*. The short-term tasks outlined in this plan were developed to focus on three primary components: (1) developing a thorough understanding of the

focus on three primary components: (1) developing a thorough understanding of the issues and management of the Truckee River basin; (2) gain information for refining a future recovery strategy for LCT in the Truckee River basin; and (3) implement a scientifically based Adaptive Management Program. Lahontan cutthroat trout will be considered for delisting when management has been instituted to enhance and protect habitat required to sustain appropriate numbers of viable self-sustaining populations. Critical habitat has not been designated for this species.

### **3.4.2 Environmental Consequences**

As described in the 2000 EA for the A.B. 380 Program, the Proposed Action is expected to be more beneficial to fish and their habitat in the Lower Truckee River and in Pyramid Lake than conditions expected with the No Action alternative. Model results indicate that over a 95 year period, water surface elevation at Pyramid Lake would be approximately 2.1 feet higher with the Proposed Action than under the No Action alternative. Inflow to Pyramid Lake is expected to be 4,100 acre feet per year more than under the No Action alternative. The Proposed Action alternative would be expected to yield one more spawning year than would occur under the No Action alternative, resulting in approximately 58,600 adult female cui-ui more over the modeling period. While the difference between the two alternatives is relatively small, wetland and riparian habitats would benefit slightly from the additional flow under the Proposed Action alternative.

The effects on Lahontan cutthroat trout and cui-ui for the alternatives in this EA for the Retirement Program are the same as described in the 2000 EA for the A.B. 380 Program. There are no new species on the ESA list within the project area and no critical habitat has been designated that could be affected by the Proposed Action. There is no new biological information available concerning listed species which could be affected by the Proposed Action. There are no changes in the Proposed Action or its impacts not previously analyzed that would warrant new analysis for species listed in the ESA.

The 2000 EA for the A.B. 380 Program provides an analysis of effects of the No Action alternative and the Proposed Action alternative on bald eagles and on various migratory bird species within the project area. There are no changes in the Proposed Action or impacts not previously analyzed that would warrant new analysis for these species.

## **3.5 Newlands Project Operations and Infrastructure**

### **3.5.1 Affected Environment**

The 2000 EA for the A.B. 380 Program describes project facilities, Operating Criteria and Procedures, Truckee River operations, irrigated acres, wetland deliveries, project efficiency and Lahontan Reservoir operations. The Truckee River Operating Agreement (TROA) was signed in September 2008 but has not yet been implemented. The Cumulative Effects section provides more discussion on TROA.

In January 2008, a major breach in the Truckee Canal resulted in residential flooding in the City of Fernley. Water flows diverted into the Truckee Canal have been restricted to 350 cubic feet per second (cfs) by court order to provide for the safe operation of the canal while a risk assessment is completed and future options for the canal are evaluated.

### **3.5.2 Environmental Consequences**

An evaluation of the water flow and irrigation demand data for the Truckee Canal indicates that at the restricted flow regime of 350 cfs imposed by the court, there would be expected shortages within the Carson Division in 10 out of 100 years. With a flow of 900 cfs (unrestricted flow) in the Truckee Canal, the evaluation indicates there would be expected shortages within the Carson Division in 9 out of 100 years. Reclamation concludes that even with the restricted water delivery, the flow regime is adequate to meet irrigation demand in most situations and does not affect the conclusions made in the 2000 EA for the A.B. 380 Program based on the model results (Reclamation 2008).

The potential effects to the Newlands Project Operations and Infrastructure from implementation of the alternatives were described in the 2000 EA for the A.B. 380 Program. That analysis adequately addresses the effects of the No Action alternative and the Proposed Action alternative to fund the Retirement Program, resulting in the retirement of an estimated 400 to 1,877 acres of surface water rights. There are no known new circumstances, new information, or changes in the action or its impacts not previously analyzed that would warrant new analysis.

## **3.6 Water Resources**

### **3.6.1 Affected Environment**

Water resources are described in the 2000 EA for the A.B. 380 Program.

### **3.6.2 Environmental Consequences**

The 2000 EA for the A.B. 380 Program describes the long term effects of implementing either the No Action or Proposed Action alternatives. The long term is defined as the eventual resolution of legal and administrative proceedings on challenged water rights under the No Action alternative, or resolution following the retirement of 6,500 acres of water rights under the Proposed Action, in combination with final determinations in the Tribe's legal and administrative proceedings. The short term is defined as the timeframe leading up to the completion of the Retirement Program, or the timeframe prior to resolution of legal and administrative proceedings on challenged water rights. The short term effects of implementing the Proposed Action for the Retirement Program is that an estimated 400 to 1,877 acres of surface water rights in the Newlands Project would be retired, and the water associated with these water rights would not be diverted from the Truckee River for irrigation purposes. Most of the water rights that would be retired by the Retirement Program are expected to be currently unused, similar to the results of the A.B. 380 Program.

The 2000 EA for the A.B. 380 Program adequately addresses the effects of the alternatives on water resources; there are no known new circumstances, new information, or changes in the action or its impacts not previously analyzed that would warrant new analysis.

### **3.7 Air Quality, Climate Change and Greenhouse Gases**

#### **3.7.1 Affected Environment**

Since the 2000 EA for the A.B. 380 Program, Nevada standard of quality for ambient air have remained the same for the primary pollutant of potential effect for this project, inhalable particulates, particulate matter size of 10 microns or less (PM10). Nevada standards for PM10 are 50  $\mu\text{g}/\text{m}^3$  for the annual arithmetic mean and maximum 24-hour period reading of 150  $\mu\text{g}/\text{m}^3$  (Nevada Administrative Code 445B.22097, 2008). Lyon County and Churchill County continue to be in attainment for monitored Nevada air quality pollutants. The Nevada Division of Environmental Protection, Bureau of Air Quality continues to monitor air quality at sites in Fallon and Fernley, although the sites have been converted from monitoring PM10 to monitoring for ozone only at Fallon and for ozone and particulate matter size of 2.5 microns or less (PM2.5) at Fernley.

National Ambient Air Quality Standards issued by the Environmental Protection Agency (EPA) include an additional standard for PM2.5 of 15  $\mu\text{g}/\text{m}^3$  for the annual arithmetic average and maximum 24-hour period reading of 35  $\mu\text{g}/\text{m}^3$  (EPA 2010). Nevada Division of Environmental Protection *2009 Ambient Air Monitoring Network Plan* states that presently there are no violating PM2.5 monitors in the NDEP monitoring network (NDEP 2009).

The Fallon Naval Air Station (NAS) is concerned about the potential effects of blowing dust on aircraft safety at their installation. Dust storms could interfere with the ability to launch or land NAS aircraft and consequently affect their ability to implement their mission.

Climate change implies a significant change having important economic, environmental and social effects in a climatic condition such as temperature or precipitation. Climate change is generally attributed directly or indirectly to human activity that alters the composition of the global atmosphere, additive to natural climate variability observed over comparable time periods.

Greenhouse gases in the atmosphere allow short wavelength solar radiation to pass through the atmosphere to reach the earth's surface, but absorb the longer wavelength heat that is radiated back into the atmosphere from the earth. The concentration of greenhouse gases in the atmosphere has an effect on the average temperature at the surface of the earth. If the atmospheric concentration of greenhouse gases decreases over time, then more heat will escape through the atmosphere, and the average

temperature at the earth's surface will go down. If the greenhouse gas concentration in the atmosphere increases, however, less heat will escape to outer space and the average temperature at the earth's surface will increase.

The greenhouse gas of interest in the proposed project is carbon dioxide (CO<sub>2</sub>) because it is a combustion product of vehicles that would be used in agricultural operations.

### **3.7.2 Environmental Consequences**

In the short-term timeframe, most of the water rights retired by the Retirement Program are expected to be currently unused, similar to the results obtained by the A.B. 380 Program. This would produce little to no effect on current air quality conditions.

In the long-term timeframe for the No Action and Proposed Action alternatives, small increases in irrigated acreage in the Newlands Project are anticipated; however the FWS water rights acquisition program would eventually acquire up to 21,000 acres of water-righted land in the Carson Division, reducing irrigated acres in the area. The effects of these changes in active agricultural land on air quality are analyzed in the 2000 EA for the A.B. 380 Program, Section 4.5.

Implementation of the two alternatives considered in this EA for the Retirement Program is not expected to result in any changes to the analysis contained in the 2000 EA for the A.B. 380 Program for the attainment of State or National air quality standards. Neither alternative is expected to result in violations of existing air quality standards or affect attainment status of the region.

In the short-term timeframe, there would be no effect on air quality for the NAS as most of the water rights to be retired by the Retirement Program are expected to be currently unused. In the long-term timeframe the small increases in irrigated acreage in the Newlands Project under either alternative would create some adverse direct effects to air quality from fugitive dust generated by farm equipment used in routine agricultural practices on the added irrigated acres. However, the added irrigated land is expected to be scattered throughout the Carson Division which would disperse these effects. While particulates produced by agricultural practices can have period of high intensity, the activity would generally be short-term and localized. Some benefits would occur to air quality with the conversion of open inactive acreage to irrigated land where wind blown erosion and fugitive dust would be expected to decline. Neither alternative under consideration is anticipated to result in any significant impact to air quality affecting the NAS operations.

There would be no effect of the Proposed Action on greenhouse gases in the short-term timeframe, as the Retirement Program is generally expected to affect currently unused water rights. Over the long-term timeframe, carbon dioxide could increase

from routine farming practices conducted on irrigated land, as active agricultural land is expected to slightly increase from either the No Action or Proposed Action alternatives. These minor increases would be short term and localized. The effects of the Proposed Action would be less than the No Action alternative because there would be an estimated 843 acres less of irrigated acres with the completion of the Retirement Program.

## **3.8 Socio-Economics**

### **3.8.1 Affected Environment**

Annual growth rates for Churchill and Lyon counties, including the Fallon and Fernley areas, increased between 2000 and 2009, climbing a total of 10.8 percent for Churchill County and 35.9 percent for Lyon County (Nevada State Demographer's Office 2009). The changing demographics and influx of new residents accelerated the conversion of agricultural lands into housing and commercial developments, specifically in the Fernley and Fallon areas.

### **3.8.2 Environmental Consequences**

Implementation of the two alternatives considered in this EA for the Retirement Program is not expected to result in any changes to the analysis contained in the 2000 EA for the A.B. 380 Program. Neither alternative is expected to affect the population growth rate for the analysis area, nor will the demand for community services in the area be impacted. Other effects of the alternatives are adequately addressed in the 2000 EA for the A.B. 380 Program.

## **3.9 Indian Trust Assets**

### **3.9.1 Affected Environment**

The following is an updated version of the Indian Trust Assets for the Pyramid Lake Paiute Tribe and the Fallon Paiute Shoshone Tribe:

Indian trust resources are legal interests in property or natural resources held in trust by the United States for Indian Tribes or individuals. The Secretary is the trustee for the United States on behalf of Indian Tribes; all Interior bureaus share the Secretary's duty to act responsibly to protect and maintain Indian trust resources reserved by or granted to Indian Tribes or Indian individuals by treaties, statutes, and executive orders.

There are two federally-recognized tribes potentially impacted by the proposed action. The two tribes are the Pyramid Lake Paiute Tribe (Pyramid Lake Indian Reservation including Pyramid Lake), and the Fallon Paiute-Shoshone Tribes (Fallon Paiute-Shoshone Reservation and Fallon Colony). Trust resources of these tribes include land, water rights, trust income, and fish and wildlife; incomes are derived from these resources.

***Fallon Paiute-Shoshone Tribes/ Fallon Indian Reservation and Colony***

The Fallon Paiute-Shoshone Indian Reservation is located in Churchill County in west-central Nevada, approximately 10 mile northeast of Fallon and 65 miles east of Reno and Carson City. The Reservation includes members of the Paiute and Shoshone Tribes. The Fallon Indian Colony is located on 60 acres and Colony land is used for residential and commercial purposes.

Water rights on and appurtenant to the reservation are served by Newlands Project facilities and are part of the Carson Division. An estimated 5,513 of the 8,156 acres of the reservation are water righted. Approximately 1,800-3,175 acres have been irrigated. The water supply for irrigation is protected by the Newlands Project OCAP with 100% delivery guaranteed, down to a 55.6% water supply year.

The Fallon Tribes entered into a settlement agreement that was ratified by Congress as Title I of P.L. 101-618, or the Fallon Paiute-Shoshone Indian Tribes Water Rights Settlement Act of 1990. Section 103 of P.L. 101-618 limits annual water use on the reservation to 10,587.5 acre-feet (equivalent to 3,025 acres). It also, however, permits the Tribes to acquire up to 2,415.3 acres of land and up to 8,453.55 acre-feet of water rights. These water rights may be used for irrigation, fish and wildlife, municipal and industrial, recreation, or water quality purposes, or for any other beneficial use subject to applicable laws of the State of Nevada.

The Tribe has dedicated reservation acreage to be used for wetland habitat for wildlife. The Bureau of Indian Affairs entered into an agreement with the Fish and Wildlife Service in 1995 to acquire water rights for reservation wetlands; under that agreement, 1,613.4 acre-feet of water rights have been acquired.

P.L. 101-618 established the \$43-million Fallon Paiute-Shoshone Tribal Settlement Fund; interest on the Settlement Fund may be spent according to the Fallon Tribes' investment and management plan for this fund.

***Pyramid Tribe/Pyramid Lake Indian Reservation***

The reservation of the Pyramid Lake Paiutes, located in Washoe County north of Reno and including Pyramid Lake, presently covers 475,085 acres. P.L. 101-618 affirmed that "all existing property rights or interests, all of the trust land within the exterior boundaries of the Pyramid Lake Indian Reservation shall be permanently held by the United States for the sole use and benefit of the Pyramid Tribe (Section 210[b][1])."

The Federal actions that set aside Pyramid Lake Indian Reservation explicitly reserved Pyramid Lake for the Tribe's benefit. The Pyramid Tribe is allocated for irrigation an amount not to exceed 4.71 acre-feet per acre for 3,130 acres of bottomland farm (14,742 acre-feet) (Claim No. 1) and another 5.59 acre-feet per acre for 2,745 acres of benchlands (15,345 acre-feet) (Claim No. 2).

The Pyramid Lake fishery remains one of the cultural mainstays of the Pyramid Tribe. The Tribal fishery program operates hatcheries at Sutcliffe and Numana. Tribal hatcheries raise both the threatened LCT and endangered cui-ui. Along with conserving fish, the Pyramid Tribe controls fishing and hunting rights and manages these rights on the reservation.

P.L. 101-618 established the \$25-million Pyramid Lake Paiute Fisheries Fund and the \$40-million Pyramid Lake Paiute Economic Development Fund. The Pyramid Tribe has complete discretion to invest and manage the Pyramid Lake Paiute Economic Development Fund; funds are available to the Tribe when the Truckee River Operating Agreement is implemented.

### Summary

The key tribal trust assets identified for analysis are flows in the Truckee River, the elevation of Pyramid Lake and the effects on fish and wildlife that utilize these aquatic habitats. The 2000 analysis for the A.B. 380 Program evaluated if the water rights retirement program supported by federal funds would have adverse impacts on tribal trust assets as compared to the No Action alternative projected conditions. The projected condition for both alternatives was calculated using a predicted win/loss ratio based on existing litigation in the Newlands Project. Model results indicated that there would be less inflow into Pyramid Lake under the No Action alternative than after implementation of the Proposed Action alternative.

### **3.9.2 Environmental Consequences**

Implementation of the two alternatives considered in this EA for the Retirement Program is not expected to result in any changes to the analysis contained in the 2000 EA for the A.B. 380 Program. Neither alternative is expected to have any effect on the trust assets, amount of agricultural land, or amount of water delivered to the Fallon Paiute-Shoshone Tribe.

As described in the 2000 EA for the A.B. 380 Program, the Proposed Action alternative provides more benefits to the trust assets of the Pyramid Lake Paiute Tribe than the No Action alternative because less water would be diverted from the Truckee River, resulting in more flows into Pyramid Lake and higher lake elevation over time. These factors would positively influence the fisheries of Pyramid Lake and the lower Truckee River.

At the conclusion of retiring 6,500 acres of water rights, model results indicate that an estimated 843 more acres of water rights would be permanently retired compared to the No Action alternative. Water associated with these water rights would never be diverted from the Truckee River thus benefiting Pyramid Lake and the trust assets of the Pyramid Lake Paiute Tribe.



### 3.10 Other Resource Areas

For the other resource areas listed below, there are no new circumstances or information that would warrant revising the analysis completed under the EA for the A.B. 380 Program:

- Cultural Resources
- Environmental Justice

### 3.11 Cumulative Effects

Council on Environmental Quality (CEQ) regulations implementing NEPA define cumulative impacts as “...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR Section 1508.7).

The following other actions are addressed for cumulative effects.

#### **Truckee River Operating Agreement**

*Status:* The Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Truckee River Operating Agreement (TROA) was released in January 2008. The TROA document was signed in September 2008, and the final rule was published in the Federal Register (Part 429) in December 2008. The final Agreement has not yet been implemented, as final court action is required to amend the Orr Ditch Decree.

The TROA was developed to provide a more flexible, basin-wide approach to operating reservoirs and managing water releases in the Truckee River watershed. TROA would provide opportunities to store water in existing reservoirs for future manufacturing and industrial (M&I) demands during period of drought conditions in the Truckee Meadows, and to enhance spawning flows in the lower Truckee River for the benefit of Pyramid Lake fishes. It would provide for the storage and release of water from Truckee River reservoirs to satisfy the exercise of Orr Ditch and other decree water rights. TROA would satisfy dam safety and flood control requirements for Prosser Creek, Stampede, Boca and Martis Creek Reservoirs.

*Potential Effects:* TROA would have the effect of modifying Truckee River flows and the timing of those flows to benefit M&I, irrigation, fish, wildlife, water quality and recreation purposes. Under TROA, water stored in Truckee River reservoirs during wet and median years would be used to augment Truckee River flows in dry year, providing environmental and recreational benefits. Under dry hydrologic conditions, lower Truckee River flows would be greater than under current conditions because of the greater amount of stored water available for release. TROA does not

affect the exercise of Newlands Project water rights, which would continue to be served consistent with Operating Criteria and Procedures for the Newlands Project. TROA would not affect the priority of water rights or the right to divert water from the Truckee River to Lahontan Reservoir to achieve monthly storage targets. Groundwater in the Truckee and Carson Divisions would be affected by changes (increases or decreases) in the amount of water conveyed in the canals and laterals. Analysis from the TROA EIS/EIR show diversion the Truckee Canal or storage and releases from Lahontan Reservoir are similar under TROA and the other alternatives; therefore, TROA is not expected to have a measurable effect on groundwater within the Newlands Project.

The analysis in the 2000 EA for the A.B. 380 Program estimated that either No Action or the Proposed Action alternatives would result in increased irrigated acreage in the Newlands Project, increased diversions into the Truckee Canal, and decreased inflow to Pyramid Lake. Completion of the FWS Water Rights Acquisition Program would partially counteract these changes in flows. The No Action alternative was estimated to result in 10,900 ac ft less per year to Pyramid Lake, or 2% less than under current conditions. The Proposed Action was estimated to result in 6,800 ac ft less per year to Pyramid Lake, or 1.4% less than under current conditions. There is less than 1% difference between these 2 alternatives that are also considered for the Retirement Program, for estimated future flows into Pyramid Lake. However, the Proposed Action was estimated to provide 4,100 ac ft per year more to Pyramid Lake than if No Action was taken.

These changes in Truckee River flows, as analyzed in the 2000 EA for the A.B. 380 Program would result in potential effects of relatively small magnitude on Truckee River flows, and the effects of either alternative for the Retirement Program added to TROA would not cause significant cumulative effects to water resources, the riparian dependent vegetation along the Truckee River, or to fisheries.

**Truckee River Water Quality Settlement Agreement (WQSA)**

*Status:* The WQSA established a joint program to improve Truckee River water quality and aquatic resource problems through the purchase and dedication of water rights to be used for increasing flows in the river from the Reno/Sparks area to Pyramid Lake. In 2002, the Bureau of Indian Affairs (BIA) prepared an Environmental Impact Statement (EIS) addressing the WQSA and the federal water rights acquisition program. The federal action was to spend \$12 million acquiring water rights to match equal funding contributed by Reno, Sparks and Washoe County. The EIS for the WQSA Federal Program estimated that 8,500 acre-feet of water rights would be acquired with federal funds. Water rights were to be acquired from willing sellers in the Truckee Meadows (Reno/Sparks metropolitan area), the Truckee River corridor downstream to Derby Dam, and the Truckee Division of the Newlands Project. Water obtained from this acquisition program would be stored in Truckee River reservoirs managed by the Cities of Reno and Sparks, Washoe County and the Department of the Interior and released during periods of low flows in the river (BIA 2002).

The current status of the WQSA is the federal contribution of \$12 million has been expended to purchase over 2,000 acre feet of water. The local jurisdictions are nearing conclusion of their portion of the agreement and have acquired over 3,000 acre feet of water. To date, an estimated 90 percent of the water rights acquisitions have occurred from the Vista area downstream, and more than 70 percent were purchased from the Truckee Division of the Newlands Project (Great Basin Land and Water, pers. comm. 2010).

*Potential Effects:* Implementation of the WQSA has produced fewer water rights purchases than estimated at the start of the program, resulting in fewer acres of water rights obtained from agricultural lands within the Truckee Division than described in the EIS for the program. Truckee River inflow to Pyramid Lake was expected to increase under the WQSA, especially during the mid-summer timeframe. Pyramid Lake levels would benefit from the additional water. While the acquisition of Truckee Division water rights would somewhat reduce the volume of water diverted into the Truckee Canal, a sufficient quantity of water would continue to be diverted from the Truckee River to serve water rights on the Newlands Project (BIA 2002).

Implementing either alternative considered in the EA for the Retirement Program is expected to result in potential effects of relatively small magnitude to flows in the Truckee River as discussed under TROA. The effects of either alternative added to WQSA would not cause significant cumulative effects to any of the resources considered in the EA for the A.B. 380 Program.

#### **Conversion of Agricultural Land to Urban Land**

*Status:* The analysis area has experienced substantial increases in urban growth in recent years. The annual growth rates for Churchill and Lyon counties, including the Fallon and Fernley areas, increased between 2000 and 2009, climbing 10.8 percent for Churchill County and 35.9 percent for Lyon County (Nevada State Demographer's Office 2009).

*Potential Effects:* As urban growth expands in the Fallon and Fernley areas, conversion of agriculture lands to urban uses is likely to continue. The Carson Water Subconservancy District noted at the conclusion of the A.B. 380 Program that many of the acquired water rights were not used because there was no longer any actual means of conveyance for irrigation water due to the conversion of agricultural land to urban uses (CWSD 2008).

The 2000 EA for the A.B. 380 Program adequately describes the cumulative effects of urban growth and the changing land uses on the resources within the analysis area. Due to the relatively small magnitude of effects anticipated from the alternatives analyzed in this EA, it is expected that the effects of either alternative in concert with other potential actions would not cause significant cumulative effects to any resources in the analysis area.

**Recoupment Lawsuit**

*Status:* Under a 2005 U.S. District Court judgment, the Truckee Carson Irrigation District (TCID) must repay, with water, previous illegal diversions that decreased inflows into Pyramid Lake. TCID completed a portion of the repayment, but challenged the District Court decision. On April 20, 2010, the Ninth Circuit Court upheld most of the ruling by the District Court. The Ninth Circuit's decision remanded many decisions on the total repayment volume back to the District Court, where the final outcome of those remands awaits resolution.

*Potential Effects:* If recoupment is implemented as stipulated in the Federal government's motion to the court, the Newlands Project would be accountable for returning more than one million acre-feet of water to the Truckee River. Alternatively, the court could determine that less water must be re-paid. While the potential effects of recoupment cannot be accurately quantified until the U.S. District Court takes action on the recent ruling from the Ninth Circuit Court, the following potential effects to resources is summarized from the 2000 EA for the A.B. 380 Program:

Resolution of the recoupment lawsuit in favor of the United States has the potential to decrease diversions into the Truckee Canal at Derby Dam and increase flows in the lower Truckee River and inflows to Pyramid Lake. Additional river flow would benefit plant communities along the Truckee River and Pyramid Lake. Decreased diversions into the Truckee Canal would negatively affect riparian and wetland habitat along the Newlands Project irrigation canals and drains, the Carson River, and around Lahontan Reservoir. It could also decrease the amount of inflow into the Lahontan Valley wetlands, adversely affecting the quality and quantity of primary wetlands and wetland habitat. Additional river flow would benefit fish species in both the Truckee River and Pyramid Lake, as well as on other species utilizing riparian and wetland habitat along the lower Truckee River. Additional river flow would benefit surface and groundwater supplies and water quality in the Lower Truckee River area. Conversely, surface and groundwater supplies and water quality in the Lahontan Valley would be decreased due to the reduction in Truckee River diversions. Resolution of the recoupment lawsuit in favor of the United States has the potential to decrease diversions at Derby Dam and the amount of water available for irrigation in the Newlands Project. It is possible that recoupment could result in a lower quantity of productive agricultural acres which could in turn result in a small increase fugitive dust in the Newlands Project.

**Churchill County Conservation Easement and Fallon Naval Air Station Restrictive Use Easements**

*Status:* Churchill County passed a Transfer of Development Rights (TDR) ordinance. The County's goals are to preserve agricultural values and open space, and promote land development in areas that are best suited to that purpose (Lockwood, pers. comm. 2010). The Fallon Naval Air Station (NAS) has similar interests for a buffer zone around the base. Future development in the buffer zone could reduce their

ability to complete their mission and affect national security. Their highest priority areas are potential crash areas, and where noise from their operations would be contested. Consequently, the County and NAS completed a Memorandum of Agreement to support their mutual goals. Property owners enroll in the TDR program, and Churchill County, or other entities that can assemble funding such as the Nevada Land Conservancy, purchase a Conservation Easement (CE) from willing sellers. The CE removes the TDR's from the property and future use of the land is limited to agricultural use. As the water rights are an integral part of the agricultural use, they remain with the land in the CE. The County (or others) hold the CE. The NAS is supporting the effort with matching funding (75% NAS, 25% County) obtained from Encroachment Control funds. Once a property is enrolled in the TDR program the NAS purchases a restrictive use easement which restricts future construction on the property. The NAS's program does not address any water right issues on the property (Dirickson, pers. comm. 2010).

As of May 2010, the NAS had secured 26 conservation easements surrounding their base (NAS 2010).

*Potential Effects:* It is expected that most of the water rights that would be retired by the Retirement Program would be currently unused, similar to the results of the A.B. 380 Program. The Carson Water Subconservancy District noted at the conclusion of the A.B. 380 Program that many of the acquired water rights were not used because there was no longer any actual means of conveyance for irrigation water due to the conversion of agricultural land to urban uses (CWSD 2008). Since Churchill County's goal is to preserve active agricultural areas through conservation easements, it is likely that there will be minimal competition for water rights between the Retirement Program and the County's program. Since the NAS is not pursuing water rights acquisition through their program, there is no known direct competition with the Retirement Program.

**Other Actions Affecting Truckee River Flows and Newlands Project Water Supply**

*Status:* The following other actions have been identified that will likely affect flows in the Truckee River and water supply to the Newlands Project from the Truckee River in the future:

- California and Nevada water use in the Lake Tahoe basin is expected to be greater than in the past, thus less water would be available to Truckee River users.
- California water use from the Truckee River basin is greater than in the past, thus less water is available to Nevada water users.
- The use of some Orr Ditch decree water rights (including Claim Numbers 1 and 2 held by the Tribes) is greater than in the past, thus the proportionate supply to lower priority water rights is less.
- The use of reservoir storage in Independence and Donner Lakes is greater than in the past, thus less water is available for direct diversion from the Truckee River.

*Potential Effects:* The effects from these cumulative actions on river flows, groundwater recharge, and water quality will depend on what combination of these actions occurs and the timing of their implementation. Due to the relatively small magnitude of effects anticipated from the alternatives analyzed in this EA, it is expected that the effects of either alternative added to other potential actions would not cause significant adverse cumulative effects to any water resources in the analysis area.

## **Section 4**

### **Coordination and Consultation**

#### **4.1 Consultation and Coordination**

This EA was prepared in consultation with the Pyramid Lake Paiute Tribe and the State of Nevada – Department of Conservation and Natural Resources.

Pursuant to Section 7 of the Endangered Species Act of 1973, Reclamation conducted informal consultation with the U.S. Fish & Wildlife Service (FWS) in 2000 for Reclamation's participation in the A.B. 380 Program to acquire and retire surface water rights in the Newlands Project area. An August 25, 2000 letter from FWS concurred with Reclamation's finding that the proposed action is not likely to adversely affect any federally listed species. Reclamation has determined that differences between the A.B. 380 Program and the Retirement Program are administrative in nature and would not affect listed species in a manner or extent not previously analyzed. No new species have been listed for the project area, and no critical habitat has been designated that could be affected by the proposed program.

#### **4.2 Other Federal Laws, Regulations, and Executive Orders**

In undertaking the proposal, Reclamation will comply with the following federal laws, executive orders, and legislative acts: Floodplain Management (Executive Order 11988); Protection of Wetlands (Executive Order 11990); Migratory Bird Treaty Act (16 U.S.C. 703 et seq.); Federal Noxious Weed Control Act, E.O. 13112, and 43 CFR 46.215 (l).

#### **4.3 Public Involvement**

The Draft EA was issued for a 15-day public review period; in response to requests for extension, the comment period was extended for 14 days. Ten (10) letters were received during the comment period and 63 comments and responses to those comments are included as Appendix A in this EA for the Retirement Program.

## 4.4 Tribal Consultation

The Pyramid Lake Paiute Tribe and the Fallon Paiute-Shoshone Tribe were consulted pursuant to federal legislation and executive orders concerning Native American government to government consultation, including NEPA and Indian Trust Assets.

# Section 5

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